

Remarks/Arguments

This amendment is in response to the Office Action dated November 16, 2006.

Claims 1, 2, 4, 5, 11, 14 and 15-19 remain in this application. Claims 1 and 11 have been amended to make clear the plunger travels along a length within the bore. Support for this amendment is found in claim 16 and at Page 4, line 20 to Page 5, line 9.

Claims 1, 2, 4, 5, 11, 14 and 15 have been rejected under 35 USC 103(a) by Leason et al (US 5360413) in view of Tessman et al (US 6,210,372) in further view of Erskine et al (US 5,820,614)

Applicants disagree.

The present invention has **a cam and handle formed on the plunger and a cam slot in the body** in which the cam of the plunger resides and **travels within a length of the bore**. The plunger is moved along the length of the bore by one moving the handle and hence cam of the plunger in the cam slot so as to move the plunger from a closed to an open position and back again.

The cited combination of references fails to teach or suggest such a device.

Leason et al's stretchable piston 18 is moved by the application on an external device (5) such as a syringe on the pin (24) contained within the piston (18) to stretch the piston and open its holes (22) providing access to the bore 19 of the device.

Tessman et al fails to teach or suggest a handle actuated cam riding in a cam slot of the body to actuate the plunger from a closed to an open position and vice versa.

The Office action acknowledges this fact and alleges Erskine teaches a cam and a cam slot. However the specification and drawings fail to support the allegation. The alleged cam slot (139) is a "collar" formed on an adaptor. This collar mates with a "shoulder 137" of the second portion of the connector device to releasably retain the second portion in the adaptor. Column 5, lines 4-6 states:"

Preferably, adaptor 119 has a collar 139 that mates with a shoulder 137 to releasably retain the second portion in the adaptor.”

The device in question in Erksine is a two tube set that needs to be connected together. One tube end has an adaptor 119 to attach it to the second tube set. The adaptor has the collar 137 to do so. The second tube set has the shoulder 137 that fits within the collar and releasably attached to it. The amount of force required to release the shoulder from the collar is taught as varying depending the “particular applications” and by supplying adaptors with collars that provide more or less retentive contact with the shoulder. Once the two components are attached and retained to each other, a separate piercing member 129 protrudes and penetrates pre-slit septums to create fluid communication between the two components.

The reference fails to teach or suggest to one of ordinary skill in the art a cam formed on the outside of a plunger nor a cam slot formed on the body in which the cam travels nor a handle formed on the plunger that moves the plunger from closed to open and back to closed positions while the cam rides in the cam slot as is claimed in the present invention. The reference only teaches a releasable connection that is static and fixed in position to hold two tube sets together. Moreover, the only moving piece in the reference piercing member 129 has no cam or cam slot nor any handle attached to it to move. It cannot have one as it is within the tubes themselves and therefore in accessible.

Even if the shoulder and collar are considered by the Office action to be a cam and cam slot (which applicants contend cannot be and would not be interpreted by one of ordinary skill in the art to be such a device) combining it with the other art would not have taught the present invention. There is no handle mounted on the plunger that moves the plunger in a reciprocal movement along a length of the bore. Leason uses a spring actuated plunger that is actuated by an external force and device

such as a needle. The alleged "cam" of Erksine is not part of the plunger and it could not be in either Erksine or Leason due to their constructions which use internal plungers or piercing elements within a smooth bore. Moreover, the alleged "cam" and "cam slot" are fixed to each other and fail to move along a length of the bore once connected to each other. Finally, there is no handle as claimed on the plunger that moves the plunger and cam along a length of the bore.

As such the reference fails to suggest the present invention and the prima facie case of obviousness has not been established or if established has been successfully rebutted above.

Claims 16-19 have been rejected under 35 USC 103(a) by Mackal (US 2,859,932) in view of Erskine et al (US 5,820,614).

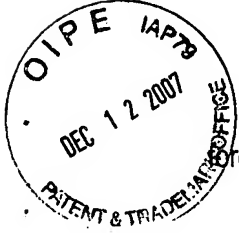
Applicants disagree.

For the reasons stated above, Erksine fails to teach or suggest a cam, cam slot or handle as are claimed by the present invention. Moreover, it fails to teach or suggest that interaction between these elements and the plunger so that the plunge and cam travel through a length of the bore from a closed to open and back to closed position.

Adding the fixed and static connection of Erksine to the valve of Mackal is inappropriate as it defeats the valve function of Mackal. Even if it were to be added the combination still fails to teach or suggest the claimed invention.

As such the prima facie case of obviousness has been successfully rebutted and the claims are in condition for allowance.

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Reconsideration and allowance of the claims is respectfully requested in view of the foregoing remarks.

Respectfully submitted,


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